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ABSTRACT

The purpose of this study was to compare low readers and high readers in adult basic education (ABE) programs in New Jersey in terms of demographic characteristics, motives for enrolling in ABE, and desire to learn certain functional competencies. Fifty-two low readers and 52 high readers responded to items on the Interview Schedule of the Adult Functional Competency Project and the data were analyzed by the Chi Square Test and "t" test. Results indicated that low readers and high readers were statistically different in race/ethnicity, previous education, and job status, but were similar in sex and income. There were significantly more blacks than whites or others in the low reading group and slightly more high readers than low readers were found among Hispanics and students of other racial backgrounds. Low readers expressed interest in basic skills, job/better life, and coping skills, while high readers were concerned with job/better life, the General Education Degree (GED), and further education. (Six pages of references and the competency interview used in the research are included.) (MAI)

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THE VALUE OF READING-RELATED COMPETENCIES FOR LOW AND HIGH READERS IN ADULT BASIC EDUCATION

A THESIS

SUBMITTED TO THE FACULTY

OF THE GRADUATE SCHOOL OF EDUCATION

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THE STATE UNIVERSITY OF NEW JERSEY

BY

GAILANNE BARTH

IN PARTIAL FULFILLMENT OF THE

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OF

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CHAPTER I

THE PROBLEM

Background of the Problem

A definition of literacy involves educational problems and philosophical points of view. Educationally, there is no one-line definition of literacy that exists. Instead, literacy is composed of a wide range of subskills, stages of incidental learning, and degrees of proficiency with the printed word. The philosophical dilemma of adult literacy is best summed up by Hillerich (1976) as follows:

> Here one is faced with varying values, varying views of the worth of the individual versus the group. Here one faces the question, "To what extent should the individual be developed?" Should he be educated only to the extent that he becomes an economic contributor and self-supporting agent within the existing structure? Or should he be developed to the extent that he becomes an independent thinker who may contribute to--or even cause--a change in the status quo? (p. 50)

These educational and philosophical issues remain unresolved. Nonetheless, literacy programs continue to be established. The nation has witnessed the development of goals and objectives for achieving literacy, criteria for its mastery, artificial dichotomies for assessing it, and curriculums for educational implementation of it. The field needs to reexamine the three main views of literacy:

(a) basic literacy, (b) functional literacy, and (c) functional competency. Basic literacy involves the basic skills of reading, writing, and computation. Functional literacy is comprised of reading tasks considered necessary for survival in adult life (Harman, 1970; Harris and Associates, Inc., 1970, 1971; Murphy, 1973; Sticht & Caylor, 1972; Sticht, Caylor, Kern & Fox, 1972; Sharon, 1972). Functional competency encompasses both "knowledges" and "basic skills" necessary for success in a changing culture (Northcutt, 1975). This paper will focus on functional competency.

The traditional definition of literacy was the number of years of formal education or achievement levels in grade level equivalencies. With the Right-to-Read mandate (Allen, 1969), reading skills, per se, became equated with functional reading competency. The research of the 70's has focused on three considerations: (a) the assessment of life/work-related tasks required of adults in our society, (b) the differentiation between the ability to read and the ability to function in society, and (c) the determination of adult reading needs, interests, and motives for functional competency.

Studies reflecting aspects of these three considerations can be divided into two types: those assessing adult reading needs and activities, and those assessing adult functional competency. The four key studies assessing

adult reading activities and needs are supported by objective surveys of the specified population to whom they are addressed. Such assessments include the Reading Activities of American Adults (Sharon, 1972), the Reading Activities of Black Adult Education Students (Tivenan, 1977), the Adult Functional Reading Study (Murphy, 1973), and the Adult Functional Competency Project (Flaherty, 1977a).

Assessments of adult functional competency, however, contain subjectively selected functional reading tasks as their test items. Such assessments include the National Reading Difficulty Index (Harris and Associates, Inc., 1971), Reading/Everyday Activities in Life (R/EAL) (Lichtman, 1972), the National Assessment of Educational Progress (NAEP) (NAEP, 1972, 1974, 1975, 1976), Project REALISTIC Job Reading Task Tests (JRTT) (Sticht et al., 1972), and the Adult Performance Level Survey (APLS) (American College Testing Program, 1976).

Specifically, the Adult Performance Level Survey based its test items on 65 objectives comprising five areas of life skills referred to as "knowledge areas," and five basic skills areas. According to the APL Project's Summary Report (Northcutt, 1975), derived tasks were based on "an investigation of the requirements for daily living through an analysis of adult living" (p. 1). However, the APL Project did not conduct a comprehensive

survey of the learners, but instead relied on experts' input.

On the urging of the U.S. Office of Education, the resulting APL objectives and tasks are being implemented in existing Adult Basic Education (ABE) curricula throughout the nation. However, this implementation began prior to rigorous verification of this research project. This premature use of the APL findings ignores areas of concern in adult education such as those pointed out by Knowles as early as 1957:

> 1. The self-perceived needs and interests of the learners themselves.
> 2. The requirements of society.
> 3. The requirements of the local community.
> 4. The institutional goals of the sponsoring organization.
> 5. Some more or less absolute body of knowledge and wisdom. (p. 23)

The Adult Functional Competency Project (Flaherty, 1977a) specifically focused on the self-perceived needs and interests of the learner. This project investigated the need and desire of ABE students in New Jersey to learn the functional competencies addressed in the APL Project. Responses of ABE students were used to rank 42 competencies. However, this ranking of competencies reflects the needs and interests of ABE students in general but ignores subgroups such as low readers within this population. The issue confronting ABE program planners is whether these differences are meaningful enough to

influence curriculum decisions in ABE.

Statement of the Problem

This study focused on low readers and high readers in Adult Basic Education (ABE) programs in New Jersey to answer the following questions:

1. What demographic characteristics differentiate low readers from high readers in Adult Basic Education?

2. Do the motives for participation of low readers differ from those of high readers?

3. Do low readers differ from high readers in their desire to learn functional competencies?

4. Do low readers indicate more desire to learn reading-related competencies than high readers?

5. Do low readers differ from high readers in their desire to learn non-reading-related competencies?

Statement of the Hypotheses

The questions posed in this study were set in the following hypotheses.

Hypothesis One

There is no significant difference between low readers and high readers in their demographic characteristics (sex, income level, race, job status, and previous education).

Hypothesis Two

There is no significant difference between low readers and high readers in their motives for enrolling in ABE programs.

Hypothesis Three

There is no significant difference between low readers and high readers in their desire to learn functional competencies.

Hypothesis Four

There is no significant difference between low readers and high readers in their desire to learn reading-related competencies.

Hypothesis Five

There is no significant difference between low readers and high readers in their desire to learn non-reading-related competencies.

Importance of the Study

"Needs and interests lie at the root of forces which motivate the adult to approach or avoid further educational experiences" (Peters & Boshier, 1976, p. 199). At the present time, well-grounded needs assessments in ABE are at a fledgling stage. Adult education is implementing APL-related materials and curriculum guidelines without assessing the needs and interests of the ABE

population. Therefore, this study focuses on these needs and interests of ABE students in New Jersey.

Functional education needs and interests of ABE students, such as those ranked by the Adult Functional Competency Project (Flaherty, 1977a), should be reflected in planning ABE programs. However, as it often is with curriculum decisions, the priorities at the top of any scale are incorporated, while those low-ranking priorities are assumed to be nonessential. As a result, they are dropped from the curriculum without investigating the needs of subgroups within the population. For example, the 42 competencies ranked by the Adult Functional Competency Project do not reflect the needs and desires of subgroups such as low readers.

Determining which competencies have value for low readers and high readers could bring about changes in curriculum content and assist programs in assessing the needs of their neglected low readers.

In particular, studies focusing on the needs and interests of low readers and high readers in ABE are nonexistant. It is hoped that this study will reveal these needs and interests and thereby aid program planning in ABE. Specifically, the value of this study has implications for reading instruction in the context of the ABE curriculum--indeed, a fledgling area of concern to ABE educators.

Definition of Terms

Low readers: those Adult Basic Education (ABE) students who scored in the bottom quartile of the total population on the Tests of Adult Basic Education (TABE), Level M, Reading Comprehension Subtest G.

High readers: those Adult Basic Education (ABE) students who scored in the top quartile of the total population on the Tests of Adult Basic Education (TABE), Level M, Reading Comprehension Subtest G.

Limitations of the Study

This study is based on the Adult Functional Competency Project (Flaherty, 1977a). It has several inherited limitations in sampling, instrumentation, and testing procedure.

Data for this study was gathered from interviews conducted by Flaherty using the Interview Schedule developed for the Adult Functional Competency Project.

This study is limited to low readers and high readers in Adult Basic Education (ABE) programs in New Jersey who have distinct learning needs, motives, and interests and who come from diverse demographic backgrounds. The results of this study are limited to comparisons with populations of the same makeup.

CHAPTER II

REVIEW OF THE LITERATURE

Prior to 1970, literacy was assessed by institutions such as the U.S. Census Bureau, UNESCO, the U.S. Army, and the U.S. Office of Education using grade-level equivalents, years of education completed, and reading achievement scores as criterion for the entire population. These indices limited literacy assessment "because they did not relate directly to literacy or . . . permit inferences about what sorts of functional competencies given levels of literacy imply" (Nafziger, 1975, p. 16). In addition, such criteria did not consider demographic variables within a given population, nor did they reflect motives, needs, and interests of the learners.

The trend in the last decade has focused on equal opportunity for all individuals in our society. It has been recognized that an individual's functional needs cannot be met by a single level of proficiency. Each level has many subskills that are used as they are needed. As a result, literacy assessment has emphasized the basic skills of reading, writing, and computation as they are needed for the individual to be functionally competent.

This section reviews literature which (1) describes

three types of literacy, (2) reassesses the extent of illiteracy, (3) describes those studies assessing adult reading behavior and adult functional competency, and (4) reviews the progress in Adult Basic Education and the theory of adult learning.

Types of Literacy

Educators dealing with literacy have attached "indicator levels" and hierarchical stages of proficiency to the definition of literacy (Hillerich, 1976; Miller, 1973; Powell, 1977; Smith, 1977). Subcategories and substitute terminologies have been coined for literacy including "basic literacy," "survival literacy," "coping skills," "practical literacy," "functional competency," "permanent literacy," "career literacy," etc. The concern of this review of the literature is with basic literacy, functional literacy, and functional competency.

Basic Literacy

The American Heritage Dictionary (1976) defined literacy as "the ability to read and write" (p. 762). This simple behavioral definition, however, has inherent complexities. O'Neil (1970) differentiated between the ability to read and being literate. He asserted that too much emphasis has been placed on reading ability, per se; ignoring prior knowledge and information processing.

> Being able to read means that you can follow words across a page, getting generally what's superficially there. Being literate means you can bring your knowledge and your experience to bear on what passes before you. Let us call the latter proper literacy; the former improper. You needn't be able to read to be properly literate. (p. 260)

The Bureau of the Census defined literacy as the ability to "read and write simple messages in English or any other language" (Harman, 1970, p. 226), while UNESCO perceived it as the ability to "both read and write a short, simple statement on everyday life" (UNESCO, 1969, cited in Harman, 1970, p. 227).

The kinds of behaviors and skills needed to read competently are also factors to consider (Bormuth, 1973-1974; Murphy, 1975; Nafziger, 1975). Bormuth stated that literacy was affected by reading ability and readability of the materials a person needs to read. He emphasized that "a person may be regarded as literate or illiterate only with respect to a particular reading task" (p. 15). Accordingly, Bormuth detailed five factors comprising a definition of literacy:

> 1) the behaviors we wish to observe,
> 2) the criterion level of performance we expect a literate person to demonstrate on tests of those behaviors,
> 3) the kinds of materials on which we test the behaviors,
> 4) the criterion proportion of the reading tasks on which the person must exhibit a literate level of behavior,
> 5) certain characteristics of the person tested, such as his aptitude and practical needs (goals). (p. 13)

Basic skills and reading behaviors are related to literacy, but this relationship changes as the demands of functioning in society confront the individual.

Functional Literacy

The ability to read should not be confused with functional literacy. In 1970, in conjunction with the Right-to-Read mandate, the U.S. Office of Education called for "the delineation of reading tasks deemed an integral part of American life and the designation of an effective level of performance on these tasks" (Gephart, 1970, p. 511). Sticht et al. (1972) addressed this concern in terms of job-related literacy demands. Sticht (1975) defined literacy as "possession of those literacy skills needed to successfully perform some reading task imposed by an external agent between the reader and a goal the reader wishes to obtain" (p. 4).

The Right-to-Read Advisory Council (1973) formulated a similar but more inclusive definition as cited by Ahmann (1975):

> A literate person is one who has acquired the essential knowledge and skills in reading, writing and computation required for effective functioning in society, and whose attainment in such skills makes it possible for him to develop new aptitudes and to participate actively in the life of his times. (p. 39)

More comprehensive definitions of functional literacy considered not only what can be read, but what was actually being read, the frequency of these different

kinds of reading behaviors, the context in which the reading occurred, how, and for what purpose (Murphy, 1973, 1975; Sharon, 1972; Tivenan, 1977).

Functional Competency

Northcutt (1974) defined literacy by emphasizing cultural and economic considerations.

> Literacy is a construct meaningful only in a specific cultural context . . . culture bound, . . . more closely bound to the technological state of a particular culture. The person who is "literate" in one culture may be "illiterate" in another. Furthermore, as technology changes, the requirements for literacy change. (p. 1)

Northcutt equated literacy with success which he defined as "a composite of income, level of education, occupational prestige, and a measure of expressed personal satisfaction with one's vocation and general status in life" (1974, p. 5).

The Extent of Illiteracy

One estimate by the late James Allen (1969), as cited in Carroll and Chall (1975), drew the following conclusions about the extent of illiteracy:

> 1) One out of every four students nationwide has significant reading deficiencies.
> 2) In large city school systems up to half of the students read below expectation.
> 3) There are more than three million illiterates in our adult population.
> 4) About half of the unemployed youth, ages 16 to 21, are functionally illiterate.
> 5) Three-quarters of the juvenile offenders in New York are two or more years retarded in reading.

> 6) In a recent U.S. Armed Forces program called "Project 100,000," 68.2 percent of the young men fell below grade seven in reading and academic ability. (p. 61)

The Survival Literacy Study conducted by Harris and Associates, Inc. (1970) for the National Reading Council, assessed the extent of functional illiteracy in a cross-section of the adult population. Information was collected on a limited range of tasks including Application for Public Assistance, Application for Medicaid, Application for Driver's License, personal identification form, and a personal loan application. This study concluded that 13%, or an estimated 18.5 million Americans, were marginally to functionally illiterate in performing the above tasks. Caughran and Lindlof (1972) questioned the accuracy of this study criticizing it for: (1) using statistical averaging, (2) utilizing altered forms with accompanying altered reading difficulty, (3) providing more readable form, (4) jeopardizing validity by variation of instructions given respondents, (5) using an indefensible scoring base, (6) not achieving a comparable level of difficulty among the five forms, and, especially, (7) ignoring intellectual limitations with regard to distribution of intelligence.

Harris and Associates, Inc. (1971), using newspaper employment advertisements, found that 92% of the sampled respondents got all nine of the questions correct, while

only 70% of all Blacks sampled got nine correct. This study brought out such demographic variables as ethnic group, income level, and educational status. A Reading Difficulty Index derived from this study was nearly three times higher for Blacks than for Whites. Findings fixed functional illiteracy at 4% of the U.S. population 16 years of age or older (approximately 5,649,000). Eighteen percent of the Black population sampled scored under 80% correct. In comparison, only 1% of the White population scored similarly.

In a nationwide assessment of functional competency, Northcutt (1974), director of the Adult Performance Level (APL) Project, reported that 20% (approximately 21 million) adults function with difficulty. In addition, 39 million adults are only marginally competent. In the specific skill area of reading, 21% of those sampled were considered functionally incompetent. Another 32% were functional (but not proficient) in coping with tasks related to reading. An estimated 16% of the White population was found to be functionally incompetent. In comparison, 44% of the Black population and 56% of the Spanish-surname population were defined similarly. According to the APL Project Report (1975), these statistical differences regarding ethnic group illiteracy are probably related to lower levels of income, education, job status, and job opportunity among minority groups in the U.S.

Fitzgerald (1974) compared reading test scores with results of HEW's Health Examination Survey in a group of children 12 to 17 years old. He performed an ethnic breakdown of illiteracy in terms of family income and noted the following:

> In families with less than $3,000 annual income, 9.8% of the white youths and 22.1% of Blacks were judged illiterate. But the inability to read dropped to 3.5% and 12.6% respectively in the $5,000 to $6,999 income level, and to 8% and 4.7% in families earning more than $10,000. (p. 3)

Caution should be taken against inferring a cause-effect relationship between socioeconomic status and level of literacy.

Both the Survival Literacy Study (Harris and Associates, Inc., 1970) and the APL Project (Northcutt, 1974) attempted to establish standard criteria for determining whether an individual was functioning well enough to cope adequately in society. These studies categorized individuals according to literate group types. The Survival Literacy Study used a single criterion, while the APL Study used three indicators of literacy. Literacy criteria from these two studies are cited below for purposes of comparison. The vast difference between these two sets of criteria is evident.

The Survival Literacy Study (Harris and Associates, Inc., 1970) categorized individuals on the basis of scores on functional competency tasks and derived the following

group types: (1) Low-Survival Threshold--those who averaged more than 30% incorrect on five forms; (2) Questionable Survival Threshold--those who averaged 20% to 30% incorrect; (3) Marginal Survival Threshold--those who averaged 10% to 20% incorrect; and (4) Likely Survival Threshold--those who averaged less than 10% incorrect on the five forms.

The APL Study (Northcutt, 1975) categorized individuals according to three indices of success including educational attainment, job status, and income level. The following functional competency levels were derived:

> APL 1's (Adults Who Function with Difficulty)
> 1) Inadequate income of poverty level or less;
> 2) Inadequate education of eight years of school or fewer;
> 3) Unemployment or occupations of low job status;
>
> APL 2's (Functional Adults)
> 1) Income of more than poverty level but no discretionary income;
> 2) Education of nine to eleven years of school;
> 3) Occupations falling in medial job status range;
>
> APL 3's (Proficient Adults)
> 1) High levels of income or varying amounts of discretionary income;
> 2) High levels of education, high school completion or more;
> 3) High levels of job status. (p. 5)

The Survival Literacy Study chose arbitrary cut-off scores for each literate group type. The APL study, via its "Success Index," placed importance on unusual factors in assessing literacy such as income level. While income and literacy may be related, Sharon (1972) cautioned against establishing a cause-effect relationship. Grade

completed criteria, unpopular as it is, also remained in this assessment of literacy. Each of the above criteria, however, permit limited inferences regarding functional competency when they are considered in the context of the learner.

Adult Reading Behavior Studies

Four studies survey reading needs and activities in the context of the learner: The Reading Activities of American Adults (Sharon, 1972); The Reading Activities of Black Adult Education Students (Tivenan, 1977); The Adult Functional Reading Survey (Murphy, 1973); and The Adult Functional Competency Project (Flaherty, 1977a). These studies are important because the needs of the learner should be central to program planning. Darkenwald and Flaherty (1977) confirm this:

> Philosophically and pragmatically, it seems untenable to argue against the primacy of self-perceived learner needs in planning educational activities for adults. To impose a scheme of education that is incongruent with adults' needs as they see them not only violates their rights as adult learners but ensures a minimum of motivation to begin and persist in learning. (p. 1)

A description of adult reading behavior encompasses three concerns. These include: (1) adult reading activities (What do adults read?), (2) adult reading interests (What motivational and learning factors are embedded in the content of the reading material?), and (3) needs assessment (What utilitarian function does reading serve?).

Assessments need to survey the reading activities and the self-perceived needs of those people to whom the programs are addressed.

Adult Reading Activities Assessments

Reading Activities of American Adults (Sharon, 1972) is a comprehensive survey of adult reading habits. In order to develop reading tasks to assess adult literacy, it was necessary to "determine what is being read, by whom, and how long, and for what reason and to determine how reading fits into people's daily activities" (Sharon, 1973-1974, p. 150). The resulting real-life reading activities became the basis for the National Reading Performance Survey (Murphy, 1973), constructed by the Educational Testing Service (ETS).

The Reading Activities of American Adults surveyed 5,067 adults, age 16 or older, to determine the reading activities of each respondent on the previous day. The reading activities were categorized according to functional reading activities such as reading at work, reading while commuting or shopping, reading business correspondence, etc. Activities that were performed consistently were rated by adults as not difficult. Time spent on activities and the importance attached to them varied greatly. On an average, American adults spend one hour and 46 minutes per day reading. Reading activities such

as price, weight, and size information were ranked as being most important. Traffic signs, package labels, and written instructions were considered slightly less important. The most commonly read material was the newspaper.

An attempt was also made to relate reading behavior to socioeconomic status via a socioeconomic index. According to Sharon, such an index reflects the economic benefits of reading. Sharon (1972) warned against assuming that reading is necessarily related to socioeconomic status or vice versa but concluded that

> Persons in white collar occupations who live in materially and educationally enriched environments spend more time reading and read a greater variety of material than those in blue collar occupations who are less affluent and have less formal education. (p. 169)

The National Reading Performance Survey (Murphy, 1973) was comprised of 170 reading tasks representative of the activities performed daily by American adults in the Sharon (1972) study. This national survey was administered to 8,000 adults. Directions for each task were read aloud. Results were reported in an item-by-item fashion. Half of the items were correctly answered by 80% of the sample. General conclusions were not attempted since no standard of functional competency against which to set them was available. However, it was noted that significant differences existed between groups of adults. For example,

Adult Basic Education students found the tasks both relevant and motivating, while other groups did not.

A study similar to that of Sharon (1972) was conducted by Tivenan (1977). This study examined the reading activities of Black adult education students preparing for the high school equivalency exam. It was found that these students spent a considerable amount of time (82 minutes per day) on outside-of-school reading. Reading activities serving utilitarian functions were deemed more important by these learners. The newspaper was read the most by this sample. The Bible was considered the most important material. However, it was noted that these two reading activities were the most difficult for these students. Forms, applications, and contracts were also identified as difficult.

While studies surveying the reading activities of adults offer an indication of functional literacy, they do not afford a guide to the interests and needs of adult readers and nonreaders.

Adult Reading Needs Assessments

The Adult Functional Competency Project (Flaherty, 1977a) was funded by a grant from the New Jersey Department of Education. It was conducted under the auspices of the Center for Adult Development at Rutgers University. The purpose of the project was to develop an instrument

(referred to hereafter as the Interview Schedule) to assess the self-perceived educational needs of Adult Basic Education (ABE) students. The 65 APL objectives served as the basis from which 42 competencies were formulated. For each of the 42 competencies assessed via the Interview Schedule, interviewees were asked whether they wanted to learn each competency, how necessary it was to learn the competency, and how much knowledge they felt they already had about the competency. Input from the students themselves, test results, and those knowledgeable of student needs were used in this needs assessment.

An aspect of this project was the determination of the relationship between basic reading skill (as measured by the Tests of Adult Basic Education (TABE), Reading Comprehension Subtest G, and functional competency (as measured by the Adult Performance Level Survey (APLS). A moderately low correlation between these two instruments led this research team to caution against concluding that ability to read has a small effect on functional competence. However, it was recommended that ABE instruction follow an integrated approach of basic skills in the context of functional competency.

An analysis compared the quality of students' estimation of their knowledge of a specific competency with their ability to answer an APLS test item on that competency. This comparison showed that ABE students

correctly estimated their knowledge 55% of the time and underestimated it only 12% of the time. This confirmed the fact that ABE students are realistic in determining their educational needs.

Further analysis identified differences among subgroups in their interest in or need for low-ranking competencies. Flaherty (1977a) cautioned against excluding low-ranking competencies from an ABE curriculum. It was also suggested that these competencies were primarily of interest to low readers and should, therefore, be included in the lower levels of the curriculum.

This project also explored the relationship between self-assessed knowledge and expressed interest. It was found that respondents wanted to learn competencies of which they felt least knowledgeable. This study indicated that lack of knowledge and desire to learn are significantly related ($p < .001$) for all competencies.

Adult Functional Competency Assessments

Studies relying on experts' opinion of what adults need to read in order to function in society are conjectures which warrant critical evaluation. Selection of tasks for the National Assessment of Educational Progress (NAEP), the National Reading Difficulty Index, Reading/Everyday Activities in Life (R/EAL), Project REALISTIC Job Reading Task Tests (JRTT), and the Adult Performance Survey

(APLS) are based on experts' input.

The National Reading Difficulty Index

Harris and Associates (1970, 1971) conducted two studies of the functional reading ability of American adults and derived a National Reading Difficulty Index (1971). Tasks were chosen on the basis of what experts presumed to be necessary for survival; ignoring the frequency of what was actually being read. The content of these tasks is typical of tasks encountered by most adults at some time such as welfare forms, driver's license applications, telephone directions, classified ads, etc. However, the importance of these tasks is relative to their frequency of occurrence (Sharon, 1972).

Reading/Everyday Activities in Life (R/EAL)

Lichtman (1972) developed an instrument to assess activities representative of adolescent and adult experiences with reading. Nine categories were established to represent frequently encountered printed material such as (1) signs and labels, (2) schedules and tables, (3) maps, (4) categorized listings and indices, (5) narratives, (6) magazines, (7) technical documents, (8) directions, and (9) fill-in-the-blank forms. Reading activities were then listed for each category. These reading activities were converted into task items for the assessment instrument.

Subjectivity played a role in the selection of practical life reading experiences. Lichtman (1974) stated that

> Since empirical information regarding frequently read material was not available at the time of the initial test development, the author selected materials and activities on the basis of logic and common sense. (p. 171)

Lichtman also chose the open-ended response format; a practice potentially inherent with evaluator subjectivity.

Project REALISTIC Job Reading Task Tests (JRTT)

Project REALISTIC (Sticht, et al., 1972) sought to determine functional literacy levels in military jobs and equate these with effective performance in adult life. The project examined the readability of manuals, books, and other literature used by cooks, vehicle repairmen, and supply clerks in an effort to measure the relationship of reading ability and performance on job-related tasks.

Reading materials actually used in performing job tasks were sampled. From these, job reading tasks were constructed. The resulting Job Reading Task Tests (JRTT) and a general reading test were administered to Army personnel. It was found that for a cook to get 50% of the tasks correct, he needed a 6.5 grade reading level. A mechanic needed a 5.8 grade level, and a supply clerk needed a 7.4 grade level. During the course of this research effort, a readability formula was developed for

estimating reading grade levels of job reading materials.

The National Assessment of Educational Progress (NAEP)

The National Assessment of Educational Progress (NAEP) is an information-gathering project under the auspices of the Education Commission of the States. It has the responsibility of assessing the quality of educational outcomes in an effort to "identify educational problem areas, establish educational priorities, and determine the national progress in education" (NAEP, 1974, p. 3). The NAEP continues to collect assessment data.

Periodic assessment, including cognitive and affective knowledges, skills, understanding, and attitudes are focused at four age levels (9, 13, 17, and young adults ages 26-35). These levels are believed to be representative of educational milestones achieved by students.

The NAEP is a criterion-referenced assessment and involves a variety of assessment formats requiring specific and open-ended responses. NAEP's cyclic nature of assessment provides an index of comparison by which to measure educational change. However, it is not intended to ascribe cause-effect relationships to such change. Test results are reported item by item and, therefore, limit comparison of results to relative performance rather than a standard.

Prior to NAEP's initial survey of reading ability among Americans in the four age groups (1970-1971), common speculation among educators, employers, and the general public was that reading skills were deficient in the young population. This initial reading survey, however, indicated otherwise. Skepticism prevailed; especially regarding skills necessary for performing everyday activities.

As a result, the National Right-to-Read Effort called for two successive Mini-Assessments of Functional Literacy (MAFL) (1974, 1975) among all 17-year-old students. These assessments were comprised of real-life reading tasks selected by Right-to-Read specialists. Seventeen year olds were chosen because they were considered significant consumers.

Eighty-six exercises comprised the 1974 and 1975 complete MAFL. Sixty-four of these were extracted from the 1970-71 National Reading Assessment (NAEP) of 17-year-old students as being measures of functional literacy. It was the opinion of specialists that <u>all</u> 17 year olds should be able to complete the MAFL exercises if they are to function adequately in everyday life. However, superior readers (those with CEEB scores in the 95th percentile) had low performance on three items: (1) determining the amount of money to be sent in with a book club membership application, (2) the final date on which a

traffic violation fine might be paid, and (3) an insurance policy statement concerning the correct amount of bodily injury liability coverage.

Declining performance was noted for: (1) a short passage asking which sentence does not fit, (2) extracting information from a report card, and (3) reading a billboard. Improved performance was observed with a help-wanted ad application and its terminology and coupon information.

The MAFL staff determined a second standard by which to assess functional reading skills. In order to meet the Minimally Adequate Performance (MAP) standard, 75% of the exercises had to be answered. In the 1975 MAFL, 87.4% of the total population attained the Minimally Adequate Performance. Among White students, 91.8% achieved the MAP standard while only 58.4% of the Blacks reached this level (NAEP, 1976a, p. 15).

In assessing Career and Occupational Development (COD) of American adults ages 26-35, the NAEP concluded that "those who have the least amount of education, the lowest income and the environment with the fewest resources are also those who are the most lacking in the skills necessary to improve their condition" (NAEP, 1976b, p. 1). Specifically, this assessment focused on work-related knowledge and basic skills essential to various employment situations. Skills included computation/measurement,

graphic/reference materials, written/communication skills, and manual/perceptual skills. Values and attitudes related to general employment situations were also assessed.

Adult Performance Level Project (APL)

The APL Project sought to "specify the competencies which are functional to economic and educational success in today's society" (Northcutt, 1975, p. 1). The Project's team of experts culled four sources of information including (1) a review of related literature and research, (2) a survey of state and federal agencies and foundations, (3) conferences on adult needs to obtain the input of adult educators, members of the business sector, and representatives of government agencies, and (4) interviews with undereducated and underemployed persons.

Based on these four sources of information, the APL Project team determined a taxonomy of "general knowledge areas." These included occupational knowledge, consumer economics, government and law, health, and community resources. Basic skills identified as necessary to gain competence in these areas included reading, writing, speaking and listening, computation, and problem solving.

Demographic variables were also considered including education, family income, job status, age, sex, ethnicity, occupational status, number in household, region, and metropolitan area.

Requirements for competency in each knowledge area were described in terms of a general goal statement, objectives, and tasks for achieving each objective. From these goals, objectives, and tasks, the American College Testing Service (ACT) developed a 40-item, short-answer test referred to as the Adult Performance Level Survey (APLS) (1976). This test was administered to a national sample of 4,015 Adult Basic Education students in centers throughout 30 states. The results revealed the extent of functional illiteracy in the adult population by interpreting scores according to three APL levels of functional competency. (These results are discussed in detail in an earlier section of this chapter.)

The APL Survey was criticized for attempting to measure functional competency with a reading test. Poorly constructed test items measured vocabulary instead of performance. Opinion was asked for and scored as right or wrong. Incorrect answers were reported for some of the test items.

The APL Project merits attention, especially in surpassing previous studies in delineating literacy behaviors and proposing standards for levels of success. However, several areas of the project warrant critical examination. Sources of information, bibliographical citations, and data collection procedures were left vague. Information obtained, how it was incorporated into the

design, methodology of the study, and the basis for identifying the resulting 65 objectives was not sufficiently discussed in the APL Project Report (1975). Information was also incomplete concerning the demographic characteristics of the sample, questions asked of the sampled population, and what responses were elicited. Griffith (1976) identified other problems of mistaken logic and process of the APL. He questioned its empirical validity and reliability, its similarity of assessment made by the GED, and its middle-class-oriented measure of "successful" functioning.

Sources of APL information appear weighted in favor of the experts' input over that of the adult learners'. According to Flaherty (1977a), the concern has become one of perceived needs and interests subsuming educational goals and curriculum decisions.

Also, commitment to the APL Project by the U.S. Office of Education prior to its development was obvious as evidenced by the Original Request for a Proposal (RFP) in 1971 as cited by the Division of Adult and Continuing Education (1972):

> The APL's (adult performance levels) determined by this project together with a definition of adult functional literacy will constitute the objectives of a system of adult basic education . . . all subsequent adult syllabuses and curricula will be based on the APL and will derive from it, not from school curricula. (p. 7)

The result of this advocacy has been the

implementation of APL-related objectives and other competency-based programs in curriculum designs, management systems, and instructional programs in existing Adult Basic Education programs on the state and local levels (Bureau of Occupation and Adult Education, DHEW-Office of Education, 1976).

If APL goals and objectives are to become the base for ABE programs throughout the country, efforts need to be launched to analyze these APL objectives; especially as they relate to the needs and interests of specified ABE populations.

The concerns are as follows: (1) whether APL objectives are relevant for the ABE population for which they have been developed, (2) whether APL knowledge areas and competencies are well-grounded and able to reflect the self-perceived needs of the ABE student, (3) whether they coincide with the theory and function of ABE, and (4) whether APL represents a useful adjunct to the decision-making concerns of ABE program planners.

Adult Basic Education and Functional Competency

Assessing Adult Basic Education in light of functional competency necessitates investigation of three components: (1) the progress and impact of Adult Basic Education, (2) the characteristics of the adult learner, and (3) ABE program philosophy and content.

Progress and Impact of ABE

The decade of the 60's advanced adult literacy on two fronts. Legislative programs provided federal support, and curriculum development focused on materials geared toward adult concerns. Adult Basic Education was established as Title III of the Elementary and Secondary Education Act, Amendments of 1966 (referred to as the Adult Education Act of 1966). Basic adult education was transferred from the Office of Economic Opportunity to the Division of Adult Education, U.S. Office of Education. Under Title III of this act, funds provided programs for adults who wanted to continue their education. With the Elementary and Secondary Education Act and the Education Amendments of 1974, ABE became Title VI. Features such as bilingual adult education programs and programs for institutionalized adults were added. Dispersal of funds for experimental projects was changed from the U.S. Office of Education to the state education departments. According to the Rules and Regulations for the Adult Education Act (1966), adults qualify for ABE if their

> inability to speak, read and write the English language constitutes a substantial impairment of their ability to get or retain employment commensurate with their real ability. . . . [Adult Basic Education aims to] help eliminate such inability . . . raise the level of education of such individuals . . . improve their ability to benefit from occupational training and . . . increase their opportunities for more productive and profitable employment.

The National Advisory Council on Adult Education, established by the Adult Education Act, identified goals of ABE programs: (1) "getting a job or moving to a better job"; (2) "enhancing self-esteem"; (3) "increasing civic responsibility in community, state and national affairs"; and (4) "active self-development through continuing education and further sharpening of job skills" (National Advisory Council on Adult Education, 1969, p. 2).

In a report to Congress by the Comptroller General of the U.S. (1975), ABE programs' impact on reducing adult illiteracy was assessed as minimal.

> Office of Education statistics show that, in the Adult Education program's first 9 years, about 4.6 million adults were enrolled. Through fiscal year 1972, 94 percent of the enrollees were receiving adult basic education. Only about 1 percent of the Adult Education program's estimated target population of 57 million adults and 4 percent of the 15 million adults with less than 8 years of school have participated in any given year. (p. 4)

Major criticism of ABE expressed in this status report focused on the lack of relevant, assessable program goals and objectives. Other criticisms included the inappropriateness of evaluative criteria and over-statements of program accomplishments. Of primary concern, however, was the minimal amount of concentration of ABE on the most "educationally deficient" of the ABE target population.

Adults functioning at the fourth grade level or below have been designated as the priority group in ABE

programs. However, the Comptroller's Report cited Office of Education statistics for 1972 showing less than one-third of the ABE participants to be from this group.

While the Adult Education Act prohibits use of funds for adults with a high school diploma or its equivalent, a 1971 to 1973 Office of Education-funded study found that 15% of those enrolled in ABE were from this "ineligible" group. Two-thirds of these "ineligible" adults read below seventh grade level. As a result, the Comptroller's Report recommended that Congress amend the Act to include this group.

Noteworthy benefits derived by ABE participants cited in the Comptroller's Report and the report of the National Advisory Committee on Adult Basic Education (1969), revealed the fact that many ABE students registered to vote for the first time, gained U.S. citizenship, prepared income tax forms, gained employment or increased their income and educational levels, gained economic independence, and left welfare rolls.

The report also cited reasons participants gave for leaving the program prior to completion of the school year or attainment of eighth grade equivalency. Such reasons included employment, other training, and personal goals accomplished. Positive though these reasons seemed, some ABE program drop-outs became disinterested while others expressed dissatisfaction with program

planning and scheduling.

Student motivation and retention are viewed as priority problems in ABE (Mezirow & Irish, 1974). Until recently, ABE had been equated with the development of basic skills of reading, language and computation rather than "coping skills" that promote social mobility and economic independence. However, ABE programs emphasizing adult performance skill objectives have tended to have fewer dropouts and lower percentages of absenteeism (Mezirow, Darkenwald, & Knox, 1975).

In retrospect, the field of ABE has parted from the traditional patterns of adult education that appear to amount to little more than the routine use of published reading programs (Kedney, 1976). Adult Basic Education in the 70's has witnessed the development of a philosophy of adult learning equated with the satisfaction of perceived needs of adults in a changing society.

Characteristics of the Adult Learner

The adult learner has the advantage of bringing vast amounts of experience to the learning situation that younger learners cannot. However, adults lack a prior common educational experience. This accounts for vast differences in learning need and ability. Scales and Biggs (1976) stated that adult learners have adapted

"aids" that enable them to compensate for their minimal reading skill in such a way that they are reticent within our society. These researchers noted that

> Illiteracy may be camouflaged by the dependency on actual and pictorial representations of items. In other words, some illiterate adults are able to shop, use the transportation system and discuss current events with little or no error. A reason for this may be that, over a number of years they have been able to gain basic information without having to decode graphemic symbols. (p. 3)

Similarly, Rivera (1976) pointed out that adult illiterates are hard to reach; for, having developed the means for coping with the system, they are isolated and left behind by "disconnection from the idea of education" (p. 282).

O'Donnell (1973) noted the highly developed perceptual system adult learners possess. As a result, they are able to learn quickly but need repeated and varied content in a variety of real-life contexts.

Psychological problems that interrupt adolescents' learning potential are less of an impediment in the mature adult (Brazziel, 1969). This is supported by Havighurst's contention that learning is best when certain levels of maturation, interest, and need have been reached. This is referred to as the "teachable moment."

Adult illiterates seek utilitarian value from instruction that offers immediate, tangible rewards. Brown (1970) affirmed this, describing the adult illiterate

as a "learner in a hurry." This learner, according to Kedney (1976), values instruction for its extrinsic value. Such a learner drops out when perceived utilitarian benefits are not associated with tangible outcomes and achieved in a relatively short period of time. Murphy (1969) and Lowther (1973) similarly contended that intrinsic motivation was insufficient. Some external reinforcement (i.e., employment, monetary reward, etc.) is necessary to keep ABE students in a program long enough for a significant amount of learning to take place.

Adult Education attrition studies (Boshier, 1972; Verner & Davis, 1964) revealed that intrinsically motivated adults are nonpersisters. According to Londoner (1972), they persue imperceivable qualitative goals and intangible self-improvements. They lack motivation because they do not expect immediate external rewards.

Grabowski (1976) cautioned against appealing solely to basic needs:

> The way to realize the full potential of the learners is to motivate them by appealing to their need for autonomy and self-fulfillment, not merely by appealing to their basic needs and thereby imposing extrinsic forms of motivation and encouragement. (p. 221)

Goals and motives of adult learners, especially ABE students, range from the desire to learn to read, to desire for a better job, to desire for self-improvement.

These motives are subsumed in Maslow's hierarchy of needs (survival needs, safety needs, social needs, esteem needs, and self-actualization needs). They are reiterated by Houle (1961), Sheffield (1962), Burgess (1971), Sovie (1972), and Grabowski (1972). Motives are responsible for initiating behavior. According to Etheridge (1976), "when people recognize that there is a gap between the actual, the possible and the desirable and place value on attaining the desirable, they become motivated to change" (p. 225).

Program Philosophy and Content

The diversity of views held by adult educators are best summed by Knowles (1957) as differences over "what ought to be taught, how adults should be taught and the proper aims of adult education in a democratic society" (p. 234).

Irish (1975) contended that adult education must confront the issue of whether adults "can control the conditions of their lives or whether they merely adapt to the conditions created by the onrush of impersonal forces of social and economic 'progress'" (p. 126).

A major concern of ABE programs is school curricula. Several approaches have been employed including the typical "3 R's" approach. Other approaches include the basic skills applied to life skills (integrated)

approach, the strictly life skills approach including classes in job-finding skills, citizenship and consumer education, and the functional competencies approach. A major criticism, however, of such ABE programs is the "transference of actual grade school curricula to adult courses" (Harman, 1970, p. 237).

Mezirow et al. (1975) contended that actual teaching of the "3 R's" in the context of functional competency is thwarted by a scarcity of life-skills materials, teachers who feel at home with the "3 R's" approach or are unfamiliar with methods of teaching life skills, an abundance of part-time teachers with other full-time concerns and those who feel, as Irish (1975) contended, that by teaching life skills, educators are controlling the conditions of adults' lives.

ABE programs lack a prescribed sequence of content adults need to learn. Conflicts over program content appear twofold: (1) what are the legitimate sources of program content?; (2) what should comprise the content of Adult Basic Education? Generally, sources of content have eminated from preconceptions, value judgments, and traditional interests of program planners. These sources neglected the self-perceived needs, interests, and motives of the adult learner. A national questionnaire (Mezirow & Irish, 1973) querying ABE program directors and teachers concluded that programs need to:

1. Include diagnosis of participants' needs;

2. Prescribe learning activities to meet individual participant needs;

3. Build self-confidence and motivation;

4. Promote locally adapted materials.

Two programs that addressed the above concerns are the "Cultural Literacy" program of Paulo Freire (1970) and the Apperception-Interaction Method (AIM) for Practical Action program. The Freire approach deepens the awareness of culturally oppressed people. The process of dialoguing teaches learners to assert themselves by recognizing and improving real-life needs. AIM, drawing on the Freire approach, is an experimental literacy program which emphasized learning by doing. Students discuss individual concerns and confrontations and are directed to take appropriate measures to cope with, alleviate, or possibly change their life situations. While not directly based on APL-related objectives, the AIM program uses an APL-developed assessment instrument.

The need for a defined set of objectives on which to base ABE program development is obvious. Realizing this need, the Office of Education funded and supported the APL Project. An inherent flaw in this major research project is that it is heavily expert-based; allowing little input from the learners themselves. Could it be that some of these learners desire to learn functional

competencies more than others? Is the low reader, in particular, interested in learning functional competencies?

CHAPTER III

METHODS

This chapter will describe the population used in this study and the instruments that were used to gather the data. Since, to some extent, the data is not new but rather a reanalysis of data gathered by Flaherty (1977a) for the Adult Functional Competency Project, a further explanation of Flaherty's work is given so that the original work of this investigator can be seen more clearly. Basically, Flaherty was interested in the total ABE population of the State of New Jersey while this study was concerned with a contrast between the low and high readers of this population.

The hypotheses from Chapter I are restated in the data-gathering section so that the precise method of answering them is explained. An explanation of statistical tests of significance follows.

Total Population

The subjects selected for this study were a subsample of a larger population comprising the Adult Functional Competency Project (Flaherty, 1977a) conducted by the Center for Adult Development at Rutgers University.

The Adult Functional Competency Project consisted of 204 English-speaking (not necessarily native speakers of English) Adult Basic Education students in day and evening adult learning centers or public-school-sponsored adult evening classes throughout New Jersey during the 1976-1977 academic year. Flaherty's sampling covered 20 class sites in 10 different school districts in rural, urban, and suburban ABE programs in North, Central, and South areas of New Jersey. The sample was proportionate to the size distribution of ABE programs in New Jersey. Ten students from each of the 20 programs were chosen at random from students who were present on the date the Project Staff visited each class site. Students who preferred not to participate were eliminated. "In the event that less than ten students were available from a given program, the balance was obtained from an alternate program in the same size category" (Flaherty, 1977a, p. 5). A list of the programs and the numbers of students selected from each along with specific sampling procedures of the Adult Functional Competency Project is detailed by Flaherty (1977a).

Description of Total Population

The demographic characteristics and motives for enrolling in ABE programs provide a description of the Adult Functional Competency Projects' total population.

According to Flaherty (1978), 80% of the total population was under 40 years of age. Fifty-seven percent were women, and over half of the population was Black. Almost 80% of the respondents had less than 12 years of previous education while 12% were high school graduates.

There was a large number of respondents with limited English-speaking ability. This unexpected occurrence, as suggested by Flaherty, resulted from the policy of several ABE programs of combining native speakers of English with all but beginning ESL students.

Sixty percent of the respondents had yearly incomes of less than $7,000, but only 10% had incomes of over $15,000 per year. Approximately 33% were employed full time, and another 11% were employed part time. Forty percent of the total population were unemployed, but less than 5% were receiving unemployment compensation. Welfare was the primary source of income for 20% of the population. Homemakers made up 10% of the total population.

Enrollment data showed that almost 50% had been in the program for less than three months. More than 25% had enrolled before in an ABE program.

Motives for enrolling in ABE programs were mixed. The desire to obtain a GED was indicated by almost 50% of the respondents. Forty-two percent said they were attending ABE classes to improve their chances for a job

or better life. While 14% indicated college or further education as their reason for enrolling, another 13% tended toward basic skills such as learning English or learning to read. Self-satisfaction appeared least among the motives for enrolling in ABE classes.

Selection of Subsample

Two groups of subjects from the Adult Functional Competency Projects' total population were chosen by the author on the basis of reading ability as measured by the Tests of Adult Basic Education (TABE), Level M, Reading Comprehension Subtest G. Those scoring in the top quartile were labeled "high readers" (n=52). Those scoring in the bottom quartile were labeled "low readers" (n=52). It is of interest that the top quartile coincided exactly with the number of subjects at the eighth grade reading level or above (by TABE subtest grade equivalent standards) while subjects in the bottom quartile achieved no higher than fifth grade reading level on the TABE subtest.

Data-Gathering Instruments Used in This Study

Data from three assessment instruments were used by Flaherty for describing demographic characteristics, reading ability, functional competency, and the self-perceived needs and interests of the population in the Adult Functional Competency Project. These instruments

were the Tests of Adult Basic Education (TABE), the Adult Performance Level Survey (APLS), and the Interview Schedule. Information from two of these instruments was reanalyzed for this study. These instruments were the Tests of Adult Basic Education (TABE) and the Interview Schedule.

Tests of Adult Basic Education (TABE)

The Adult Functional Competency Project chose the TABE Level M because it is used by most ABE programs in the state as a placement and achievement test. Specifically, Reading Comprehension Subtest G was used by the Project for the purpose of reading ability assessment. This present study, however, used this subtest as the basis for the selection of its subsample.

The TABE, Reading Comprehension Subtest G, was administered by the various ABE programs in advance of Project interviews under untimed conditions. The Project's research team felt that untimed administration would yield a truer measure of adult reading ability. As a result, testing conditions and controls may have been compromised to the extent that results were affected.

In addition, some of the low readers were not administered the TABE. As a result, the number of students with less than fourth grade reading level is underrepresented. The total population had only 13.5% reading

at or below fourth grade level.

Reading Comprehension Subtest G (Understanding What You Read) is a 30-item test composed of three reading passages. Each passage is four or five paragraphs in length and followed by multiple choice questions. Four basic types of questions are employed including (1) understanding the main idea (4 items), (2) finding the facts (11 items), (3) drawing conclusions (7 items), and (4) organizing ideas (4 items). Caution should be taken against assuming that this subtest provides a comprehensive measure of basic reading ability. The total TABE Reading Test, composed of seven subtests, is, indeed, more comprehensive. However, because of time and cost factors, only Reading Comprehension Subtest G was used.

The TABE is a standardized achievement test of the basic skills in reading, language, and arithmetic for adults. Validity data is based on the 1957 edition of the California Achievement Tests (CAT), elementary level (forms W and X, 1963 norms) devised by Tiegs and Clark (1957) and published by the California Test Bureau (1957, 1963, 1967). Norms, reported in terms of grade equivalents, are identical to the 1963 standardization of the 1957 CAT. Norming data is reported for the total battery, its three subject areas, and their two subparts. No data is available for the 18 subtests comprising the total battery. A split-half reliability coefficient

reported for the total TABE Reading Test was .95 and .97 for the total TABE battery. Test-retest coefficients ranged from .86 to .88 for the total TABE Reading Test and from .91 to .92 for the total TABE battery.

The TABE is criticized as a repackaging of items from the 1957 CAT battery which was normed for an elementary school population. TABE's "inherited" validity is questionable in light of child-to-adult language differences, format revisions, target population differences, and inappropriate norming procedures. Content validity is based on the assumption that real life literacy demands for disadvantaged adults can be tapped via an instrument designed for elementary school children.

Interview Schedule

In order to collect data on the self-perceived needs of ABE students, a structured Interview Schedule was developed by the Adult Functional Competency Project Team. The 42 competencies included in the Interview Schedule were selected to reflect objectives in each of the five knowledge areas as well as represent the total body of 65 objectives delineated in the APL study. Detailed documentation of the procedures followed in formulating the Interview Schedule are not available. The final report stated that the original 65 APL competencies were reduced to 42 by "eliminating competencies that were

similar or related to other competencies or that were of less significance . . . " (Flaherty, 1977a, p. 9). The resulting Interview Schedule (Flaherty, 1977b) contained questions intended to investigate the following major points of concern to ABE students as well as program planners:

> 1) ABE students' desire to learn each of the 42 competencies, as measured by the interview question: "Do you want to learn about _____ in your adult education class this year?" . . .
> 2) Priority students place on learning each of the 42 competencies, as measured by the following interview question, asked only when respondents said they wanted to learn a competency: "Do you think it's necessary, helpful, or just interesting for you to learn about _____ in your adult education class this year?" . . .
> 3) Priority students place on learning each "knowledge area," as measured by combined responses to the two above questions for all the competencies in each of the five knowledge areas . . .
> 4) . . . Students' assessment of their own ability relative to the competency as measured by the interview question: "How much do you know about _____?" (Response options: A lot, Pretty much, A little) . . . (p. 10)

5. Whether and how often students might use each competency, the basic skills needed to perform the competency, and whether the student felt the need to learn the competency. Information was obtained by in-depth questioning on one competency from each of the five knowledge areas.

6. Whether there may be other skills and topics the student might already possess or want to learn as gathered from open-ended questions.

7. Characteristics of the ABE population such as race, sex, income level, job status, educational attainment, reasons for enrolling in ABE programs, etc., gathered from the "Background Section" of the Interview Schedule (Questions 63-92) (Flaherty, 1977a, p. 9).

Drafts of the Interview Schedule were field tested in five different ABE programs with 21 ABE students. Preliminary testing was also conducted by persons familiar with ABE students; role-playing situations were used. After 10 revisions spanning a five-month period, retesting, and consultations with ABE experts, the 45-minute Interview Schedule was put into operation (February and March of 1977).

Reliability of the Interview Schedule was established by asking a sample of ABE students the question: "Do you want to learn _____ in your adult education class this year?" A sample of the 42 competencies was included in the reliability test questionnaire (Flaherty, 1978) which was presented to 45 students the first time, and 28 of these completed the questionnaire a second time. The results of the two administrations yielded the same responses 88.9% of the time. Individual items were consistent 75% to 100% of the time.

A copy of the Interview Schedule appears as Appendix A.

Data Gathering

Data for this study was extracted and reanalyzed from Flaherty's Interview Schedule. Responses given by low readers were tabulated separately from those of high readers by the author. Data pertaining to each of the hypothesis in this study was gathered as follows.

Hypothesis One

This hypothesis stated that there is no significant difference between low readers and high readers in their demographic characteristics of sex, race/ethnicity, previous education, job status, and income level. The five demographic characteristics were chosen for the purpose of describing low readers and high readers in this sample. Data pertaining to these demographic characteristics was obtained from the "Background Section" of the Interview Schedule (Questions 63-92); specifically, Question 63 (sex), Question 64 (race/ethnicity), Question 74 (income level), Question 75 (job status), and Question 85 (previous education). Frequencies were tabulated for responses given by low readers and high readers in each category within each of the five demographic variables. These frequencies were presented in five contingency tables to allow comparison among the categories for each group of readers.

Hypothesis Two

This hypothesis stated that there is no significant difference between low readers and high readers in their motives for enrolling in ABE programs. Motives for enrolling in ABE programs were derived from responses to Item 88 of the "Background Section" of the Interview Schedule: "What is your main reason why you enrolled in this adult education class?" Responses to this open-ended question were separated into the following five categories: further education, job/better life, GED, basic skills, and coping skills/self-satisfaction. Frequencies were tabulated for responses given by low readers and high readers in each of these categories. The obtained frequencies were presented in a contingency table to allow comparison among the categories for each group of readers.

Hypothesis Three

This hypothesis stated that there is no significant difference between low readers and high readers in their desire to learn functional competencies. Frequencies were tabulated for "yes" responses given by low readers and high readers to the following question which was asked for each of the 42 competencies in the five knowledge areas: "Do you want to learn _____ in your adult education class this year?" These 42 competencies were

then separated into reading-related competencies and non-reading-related competencies and became the basis for Hypotheses Four and Five.

Hypotheses Four and Five

Hypothesis Four stated that there is no significant difference between low readers and high readers in their desire to learn reading-related competencies. Hypothesis Five stated that there is no significant difference between low readers and high readers in their desire to learn non-reading-related competencies.

Reading-related competencies were separated from the total number of competencies. Flaherty (1978), however, stated that competencies not related to reading had been excluded from the Interview Schedule. It was difficult to separate competencies involving general knowledge from competencies involving reading skills. "Since general knowledge may be used as content for reading materials, competencies involving general knowledge were retained, along with those involving reading skills" (Flaherty, 1978, p. 19). However, in the present study, these general knowledge competencies were considered non-reading-related competencies.

The following examples of non-reading-related competencies demonstrate the general knowledge content of these competencies: "Where to get help if you're

cheated"; "How the government spends your money." Reading-related competencies involved the use of various reading skills as can be seen in the following examples of reading-related competencies: "Filling out an income tax form"; "Reading and using help wanted ads in the newspaper"; "How to use a city map or road map."

Frequencies tabulated for the reading-related competencies were converted to percentages. A table was employed in which these competencies were ranked according to the percentage of low readers and high readers who desired to learn these competencies. The percentage difference between these two groups was computed to allow comparison among the reading-related competencies. A similar table was employed for the non-reading-related competencies.

Statistical Treatment

In order to test Hypotheses One and Two, the Chi Square Test (Tuckman, 1972, p. 249) was performed to determine whether significant differences exist between low readers and high readers with regard to (1) demographic characteristics and (2) motives for enrolling in ABE programs.

In order to test Hypotheses Three, Four, and Five, *t* tests (Tuckman, 1972, p. 232) were performed to determine whether significant differences exist between low readers

and high readers in their desire to learn functional competencies, reading-related competencies, and non-reading-related competencies.

In each case, the null hypothesis that there is no significant difference between responses of low readers and high readers on each variable was tested. Rejection of a null hypothesis showed that a significant difference existed with regard to the particular variable tested.

CHAPTER IV

FINDINGS AND DISCUSSION

This study looked at differences between low readers and high readers in ABE classes by reanalyzing data from the Interview Schedule of the Adult Functional Competency Project (Flaherty, 1977a). All of the Interview Schedules of the low readers (n = 52) and of the high readers (n = 52) were analyzed to provide the findings in this chapter.

Findings of the Hypotheses

Hypothesis One: Demographic Characteristics

The first hypothesis of this study stated that there was no significant difference between low readers and high readers in the demographic characteristics of sex, race/ethnicity, previous education, job status, and income level. The findings were as follows.

Sex.--There were 27% more females (33) than males (19) in the high reading group, but an almost equal proportion of females (27) and males (25) in the low reading group. The differences were not significant at the .05 level. See Table 1.

TABLE 1

COMPARISON OF LOW READERS TO HIGH READERS
ON DEMOGRAPHIC VARIABLE OF SEX

Readers	Sex		Total
	Male	Female	
Low	25	27	52
High	19	33	52
Total	44	60	n=104

Note. $\chi^2 = .984$ (df = 1); p > .05.

Race/ethnicity.--There were 17% more low readers (33) than high readers (23) among Black students. An almost equal proportion of low readers (13) and high readers (14) were white. Forty-three percent more students in the category Other were high readers (15) than low readers (6). This last category primarily included Hispanics with a few students from other racial backgrounds. Blacks (33) exceeded the combined total of Whites (13) and others (6) in the low-reading group by 27%. In the high-reading group, there were approximately 17% more Blacks (23) than either Whites (14) or others (15).

These differences were significant at the .05 level. See Table 2.

Previous education.--Low readers tended to have less previous education than high readers. There were three times as many low readers (18) than high readers (6) in the 0-7 years of education category. Over half of the responses (56) fell in the 8-11 years of education category with 14% more high readers (32) than low readers (24). A small but equal number of low readers (7) and high readers (7) had completed 12 or more years of education. These differences were significant at the .05 level. See Table 3.

Job status.--An almost equal proportion of low readers (20) and high readers (23) were employed. There

TABLE 2

COMPARISON OF LOW READERS TO HIGH READERS ON DEMOGRAPHIC VARIABLE OF RACE/ETHNICITY

Readers	Race/Ethnicity			Total
	Black	White	Other	
Low	33	13	6	52
High	23	14	15	52
Total	56	27	21	n=104

Note. $\chi^2 = 5.6$ (df = 2); $p < .05$.

TABLE 3

COMPARISON OF LOW READERS TO HIGH READERS ON DEMOGRAPHIC VARIABLE OF PREVIOUS EDUCATION

Readers	Grades Completed			Total
	0-7	8-11	12 or more	
Low	18	24	7	49
High	6	32	7	45
Total	24	56	14	n=94

Note. $\chi^2 = 6.8$ ($df = 2$); $p < .05$.

were 20% more low readers (25) than high readers (17) who were unemployed. A significant difference between employed and unemployed low readers and high readers was not evident until the responses in the category labeled Other were considered. A small proportion of low readers (7) and high readers (12) were from this Other category which was primarily comprised of homemakers. These differences were statistically significant at the .01 level. Collapsing of the categories of Homemaker and Other prevented this significance from showing in the contingency table. See Table 4.

Income level.--There was an almost equal proportion of responses at each income level (26, 30, and 24 respectively). There was no significant difference between the number of low readers and high readers at each of these levels. Approximately one-fourth of the responses (24) were from the category Other which included those respondents who were either not knowledgeable of their household income or chose not to divulge this information. See Table 5.

The hypothesis that there is no significant difference between low readers and high readers on five demographic characteristics was sustained in part. There was no statistically significant difference between low readers and high readers with regard to sex and income level.

TABLE 4

COMPARISON OF LOW READERS TO HIGH READERS
ON DEMOGRAPHIC VARIABLE OF JOB STATUS

Readers	Job Status			Total
	Employed	Unemployed	Other	
Low	20	25	7	52
High	23	17	12	52
Total	43	42	19	n=104

Note. $\chi^2 = 13.4$ ($df = 2$); $p < .01$.

TABLE 5

COMPARISON OF LOW READERS TO HIGH READERS ON DEMOGRAPHIC VARIABLE OF INCOME LEVEL

Readers	Income Level (per year)				Total
	$5,000 or less	$ 5,000 to $10,000	$10,000 or more	Other	
Low	15	13	10	14	52
High	11	17	14	10	52
Total	26	30	24	24	n=104

Note. $\chi^2 = 2.44$ ($df = 3$); $p > .05$.

However, the hypothesis was not sustained with regard to race/ethnicity ($\chi^2 = 5.6$, $df = 2$, $p < .05$), previous education ($\chi^2 = 6.8$, $df = 2$, $p < .05$), and job status ($\chi^2 = 13.4$, $df = 2$, $p < .01$), indicating that these two groups were distributed in a significantly different manner with regard to these three demographic characteristics.

Hypothesis Two: Motives for Enrolling in ABE Classes

The second hypothesis stated that there was no significant difference between low readers and high readers in their motives for enrolling in ABE classes. The findings were as follows: Low readers were more interested in basic skills (18), job/better life (13), and coping skills (10). High readers were more concerned with job/better life (22), the GED (13), and further education (10). One-third of the total responses fell in the category of job/better life, indicating that this was an overriding consideration of the enrollees.

A small number of low readers desired further education (3) or the GED (6), while a small number of high readers opted for the basic skills (4) or coping/self-satisfaction (2) category.

These differences were significant at the .001 level and justify the rejection of the null hypothesis that there is no significant difference between low and

high readers in their motives for enrolling in ABE classes. See Table 6.

Hypothesis Three: Desire to Learn Functional Competencies

The third hypothesis stated that there was no significant difference between low readers and high readers in their desire to learn functional competencies. This hypothesis was tested by analyzing the responses of low readers and high readers on their desire to learn the 42 functional competencies delineated in the Adult Functional Competency Project (Flaherty, 1977a).

It was found that a mean score of 32.8 with a standard deviation of 8.5 for the low readers was signigicantly different from the mean score of 29.0 with a standard deviation of 10.5 for the high readers. This data yielded a t value of 4.65, df = 41, $p < .001$. See Table 7. These results indicated that low readers desired to learn more functional competencies than high readers.

On the basis of this data, the hypothesis that there is no significant difference between low and high readers in their desire to learn functional competencies was justifiably rejected.

TABLE 6

COMPARISON OF LOW READERS TO HIGH READERS ON MOTIVES FOR ENROLLING IN ABE PROGRAMS

Readers	Motives					Total
	Further Educ.	Job/ Better Life	GED	Basic Skills	Coping/ Satisf.	
Low	3	13	6	18	10	50
High	10	22	13	4	2	51
Total	13	35	19	22	12	n=101

Note. $\chi^2 = 22.5$ (df = 4); $p < .001$.

TABLE 7

COMPARISON OF MEANS AND STANDARD DEVIATIONS OF READERS WITH THE DESIRE TO LEARN FUNCTIONAL COMPETENCIES AND THE *t* VALUE DETERMINING DEGREE OF SIGNIFICANCE OF DIFFERENCE

Readers	*n*	*M*	Variance	*SD*
Low	52	32.8	72.3	8.5
High	52	29.0	111.4	10.5

Note. $t = 4.65$, $df = 41$, $p < .001$.

Hypothesis Four: Desire to Learn Reading-Related Competencies

The fourth hypothesis stated that low readers and high readers did not differ significantly in their desire to learn reading-related competencies. This hypothesis was tested by analyzing the responses of low readers and high readers on their desire to learn 21 reading-related competencies which were separated from the total number of 42 competencies. (See Chapter 3 for a description of this procedure.)

It was found that a mean score of 30.8 with a standard deviation of 8.6 for the low readers was significantly different from the mean score of 23.4 with a standard deviation of 9.8 for the high readers. This data yielded a t value of 7.34, $df = 20$, $p < .001$. See Table 8. These results indicated that low readers desired to learn more reading-related competencies than high readers.

On the basis of this data, the hypothesis that there is no significant difference between low and high readers in their desire to learn reading-related competencies was rejected.

TABLE 8

COMPARISON OF MEANS AND STANDARD DEVIATIONS OF READERS WITH THE DESIRE TO LEARN READING-RELATED COMPETENCIES AND THE t VALUE DETERMINING DEGREE OF SIGNIFICANCE OF DIFFERENCE

Readers	n	M	Variance	SD
Low	52	30.8	75.1	8.6
High	52	23.4	97.2	9.8

Note. $t = 7.34$, $df = 20$, $p < .001$.

Hypothesis Five: Desire to Learn Non-Reading-Related Competencies

The fifth hypothesis stated that there was no significant difference between low and high readers in their desire to learn non-reading-related competencies. This hypothesis was tested by analyzing the responses of low readers and high readers on their desire to learn 21 non-reading-related competencies which were separated from the total number of 42 competencies. (See Chapter 3 for a description of this procedure.)

No significant difference was found between the mean score of low readers (M = 34.8, SD = 8.0) and the mean score of high readers (M = 34.5, SD = 8.1). This data yielded a t value of .350, df = 20, $p > .05$. See Table 9.

On the basis of this data, the hypothesis that there is no significant difference between low readers and high readers in their desire to learn non-reading-related competencies was sustained.

Discussion

At present, no other studies have compared low readers and high readers with respect to their demographic characteristics, motives for enrolling in ABE programs, or desire to learn functional competencies in general and reading-related competencies in particular.

TABLE 9

COMPARISON OF MEANS AND STANDARD DEVIATIONS OF READERS WITH THE DESIRE TO LEARN NON-READING-RELATED COMPETENCIES AND THE *t* VALUE DETERMINING DEGREE OF SIGNIFICANCE OF DIFFERENCE

Readers	*n*	*M*	Variance	*SD*
Low	52	34.8	64.6	8.03
High	52	34.5	66.5	8.15

Note. $t = .350$, $df = 20$, $p > .05$.

In this study, low readers and high readers were homogeneous in the demographic characteristics of sex and income level. The two groups would also have been homogeneous in job status if the categories of Homemaker and Other had been listed separately.

According to this study, the only two demographic variables that distinguished low and high readers were race/ethnicity and previous education. Specifically, there were more low readers than high readers among Blacks. More Blacks than Whites or others were from the low-reading group. Low readers tended to have less previous education. Over half of the low and high readers had completed 8-11 years of education. However, a small but equal number of low readers and high readers had completed 12 or more years of education.

Some of the demographic characteristics that ABE students share appeared to influence their motives for enrolling in ABE programs. For example, low readers had less previous education and indicated basic skills, job/better life, and coping skills/satisfaction as their motives for enrolling in ABE programs. Few high readers had previous education of 12 years or more and indicated further education or the GED as their reasons for enrolling in ABE programs. High readers in general placed most emphasis on job/better life but also recognized the value of the GED and further education. Low readers expressed

minimal interest in further education or the GED while high readers expressed minimal interest in basic skills and coping skills.

These motives, in turn, appeared to influence low readers and high readers in their desire to learn functional competencies in general and reading-related competencies in particular. Students tended to choose competencies that would allow them to achieve their goals.

The finding that low readers and high readers differed in their desire to learn functional competencies is in harmony with Flaherty (1977a) who, in general, concluded that reading ability is a predictor of interest in certain competencies. The current study specified the nature of that relationship by identifying the different competencies which low readers and high readers desire to learn.

Low readers and high readers differed significantly in their desire to learn reading-related competencies but did not differ in their desire to learn non-reading-related competencies. Thus, it might be concluded that the desire to learn reading-related competencies accounted for the variance between low readers and high readers in their desire to learn functional competencies.

It may also be inferred that reading ability is inversely related to the desire to learn reading-related competencies; that is, low reading ability predicts a high

desire to learn reading-related competencies and high reading ability predicts a low desire to learn reading-related competencies. However, further analysis of the data indicated otherwise.

A ranking of reading-related competencies according to the percentage of the sample which wanted to learn each one (see Table 10) provided a descriptive analysis of the differences between low readers and high readers in their desire to learn reading-related competencies.

Low readers desired to learn reading-related competencies requiring reading skills that involve symbols such as numbers, signs, charts, etc. This is evidenced by the wide percent of difference (reported in the extreme right column of Table 10) between low readers and high readers on such competencies as:

How to compute and compare unit prices	.21
How to use a city map or a road map	.12
Reading and using a thermometer	.21
Reading a calorie chart and figuring out how many calories you've eaten	.23
Reading direction signs	.26
How to use a bus or train schedule	.11

One might reasonably ask whether we truly read when we read a thermometer or a bus schedule or a calorie chart, or when we compute and compare unit prices. It is difficult to determine the nature and level of the reading

TABLE 10

RANKING OF READING-RELATED COMPETENCIES BY PERCENTAGE OF READERS WHO WANT TO LEARN

Competency	Readers				Difference
	Low n=52[a]	Rank	High n=52[b]	Rank	
Filling out an income tax form	82	1	78	1.5	4
How to compute and compare unit prices	78	3	57	4.5	21
Life insurance	78	3	71	3	7
Reading and using help wanted ads in the newspaper	78	3	50	9.5	28
Guarantees and warranties	71	6	78	1.5	7
How to fill out job applications	71	6	53	8	18
How to read a voting ballot	71	6	50	9.5	21
How to use a city map or road map	69	8	57	4.5	12
Reading and using a thermometer	67	9	46	11	21
Apartment leases	65	10.5	55	6.5	10
Using a checking account at a bank	65	10.5	55	6.5	10

TABLE 10--Continued

Competency	Readers				Difference
	Low n=52[a]	Rank	High n=52[b]	Rank	
Reading a calorie chart and figuring out how many calories you've eaten	63	12	40	13	23
Reading advertisements in a newspaper	59	13	38	14	27
Getting a charge account or a credit card	50	14	44	12	16
Reading direction signs (e.g., signs in a subway or bus station, or on the street	46	15	30	16	26
How to read medicine labels	42	16	26	18	24
Reading and using coupons	40	17.5	30	16	10
Ordering from a restaurant menu	40	17.5	19	20	21
Using a cooking recipe	34	19	30	16	4
How to read a bus or train schedule	34	20	23	19	11
How to use a telephone directory	17	21	7	21	10

[a] $\underline{M}$ = 59; $\underline{Mdn}$ = 65; $\underline{R}$ = 65 (17-82).

[b] $\underline{M}$ = 45; $\underline{Mdn}$ = 48; $\underline{R}$ = 71 (7-78).

skills involved in performing each of these competencies.

The two reading-related competencies revealing the greatest percent of difference between low readers and high readers were related to the newspaper: reading and using help-wanted ads in the newspaper (.28) and reading advertisements in the newspaper (.27).

As might be expected, reading and using help-wanted ads was of a higher priority than reading general ads in the newspaper for both groups of readers. This difference was most pronounced for the low readers. In fact, they ranked skill with help-wanted ads as the fourth highest priority.

The desire to learn how to read the newspaper is related to the findings of Sharon (1972) that the newspaper was the most commonly read material of American adults. Tivenan (1977) similarly concluded that the newspaper was the most commonly read material of Black adult education students and presented the most difficulty for these students.

Low readers as well as high readers desired to learn reading-related competencies involving higher level reading skills related to contracts, leases, and legal documents. This was evidenced by the small percent of difference between low readers and high readers on the 10 reading-related competencies which each group ranked highest. Below are listed the four highest ranking

competencies with their percent of difference:

Filling out an income tax form	.04
Life insurance	.07
Apartment leases	.10
Guarantees and warranties	.07

Overall, percentages of low readers who wanted to learn 13 of the 21 reading-related competencies were above the .59 mean. Similarly, percentages of high readers who wanted to learn 11 of the 21 competencies related to reading were above the .45 mean. These findings indicated that both low readers and high readers had a high desire to learn these competencies.

Therefore, it should not be assumed that reading-related competencies can be focused at just the lower levels of an ABE curriculum as Flaherty (1977a) suggested. Her conclusion concerning this point was different because her study reported the desire of the total group to learn the reading-related competencies, while the present study contrasted the desire of low readers with that of high readers to learn these competencies.

It was concluded that there was no significant difference between low readers and high readers in their desire to learn non-reading-related competencies ($p > .05$. However, on the basis of evidence in Table 11 indicating the percent of low readers and high readers who desire to learn non-reading-related competencies, it can be

TABLE 11

NON-READING-RELATED COMPETENCIES BY PERCENTAGE OF READERS WHO WANT TO LEARN

Competency	Readers	
	Low n=52[a]	High n=52[b]
Where to get help if you're cheated	86	84
Where to get information (on anything) when you need it	86	76
How the government spends your tax dollar	82	78
How laws are made	82	75
Fringe benefits offered by different employers (e.g., sick pay, vacations)	78	86
Where to get help finding a job	75	78
How the court system works	75	84
Where to get money if you don't have a job	75	67
Rights of a person who is arrested	73	75
What to do and say at a job interview	73	78
Unions	69	69
Budgeting your money	69	65
What is dangerous to health	69	65
Buying a house	61	65
How to prevent fire in your home	61	65
How to get a lawyer	59	53
What to eat to keep healthy	57	61
How to keep from getting fired	53	55
Rules for driving in New Jersey	48	40

TABLE 11--Continued

Competency	Readers	
	Low $n=52^a$	High $n=52^b$
Parks and recreation in your community	42	34
Methods of birth control	25	32

[a] $M = 66.5$; Mdn = 69.0; $R = 61$ (25-86).

[b] $M = 66.9$; Mdn = 69.0; $R = 52$ (32-84).

concluded that both of these groups have a high desire to learn these competencies. Approximately two-thirds of both the low readers and the high readers desire to learn 15 of the 21 non-reading-related competencies. Program planners in ABE are therefore cautioned against formulating a separate curriculum for the low and high reader.

In conclusion, it appeared that low readers desired to learn reading-related competencies that include basic reading skills as well as higher level reading skills. High readers generally desired to learn reading-related competencies that involve the higher level reading skills. In addition, low readers and high readers both had a high desire to learn the non-reading-related competencies. The reader is therefore cautioned against assuming that reading ability is inversely related to desire to learn reading-related competencies.

One of the limitations of this study was that 9 of the 21 reading-related competencies had the word(s) "reading" or "to read" directly stated in them. Low readers differed 20 percentage points or more from high readers in their desire to learn 7 of these 9 reading-related competencies. It is possible that low readers, knowing they need reading skills but not sure what these skills entail, chose these competencies on the basis of the cue value of this key word. This limitation of the Interview Schedule could be alleviated by rephrasing these

competencies using nonspecific phrases such as "How to . . . "; "Obtaining information about . . . "; "Understanding and using . . . "; etc.

Another limitation was that three of the reading-related competencies appeared to be "seasonal." The desire to learn about filling out an income tax form, guarantees, and warranties, and how to read and use a voting ballot could vary depending upon time of year. There is a strong possibility that this was the case with two of the three competencies as the Interview Schedule was administered in February and March (1977); a season of the income tax form and the voting ballot.

Some information was lost in the Chi Square contingency tables because categories were broadly defined. For example, income levels of $5,000-$10,000 comprised a single category. The category Other in race/ethnicity was primarily comprised of Hispanics with Orientals and other minorities. A reanalysis of the data which subdivides these categories may provide a better description of the ABE population.

CHAPTER V

SUMMARY AND CONCLUSIONS

The purpose of this study was to compare low readers and high readers in ABE programs in New Jersey in terms of their demographic characteristics, motives for enrolling in ABE, and their desire to learn certain functional competencies.

Responses of 52 low readers and 52 high readers to selected items from the Interview Schedule of the Adult Functional Competency Project (Flaherty, 1977a) were tabulated. This data was analyzed using the Chi Square test and the t test to determine the significance of the difference between responses of low readers and high readers. Responses concerning the desire to learn 21 reading-related competencies were also used to rank those competencies according to the percentage of low readers and high readers who desired to learn them. This ranking allowed a comparison of the two groups. A similar comparison was performed for non-reading-related competencies.

Conclusions

The data in this study supported the first hypothesis in part. It indicated that low readers and high readers were statistically different in their race/ethnicity, previous education, and job status, but were homogeneous with regard to sex and income. For example, there were significantly more Blacks than Whites or others in the low-reading group. Slightly more high readers than low readers were found among Hispanics and students of other racial backgrounds. Among the total number of low readers and high readers comprising this study, twice as many were Black than White with an almost equal proportion of Whites to others.

Low readers and high readers were strongly differentiated by the variable of previous education. Low readers were found to have less previous education. A small and equal number of low readers and high readers had completed 12 or more years of education.

The statistical difference in job status was partly the result of the arrangement of the contingency table. There was little difference between low readers and high readers who were employed, while slightly more low readers than high readers were unemployed. These two groups were basically homogeneous in this respect. However, in reanalyzing the category Other, it was noted that more high readers than low readers comprised this

category which was primarily made up of homemakers.

While no difference was statistically indicated with regard to the demographic characteristic of sex, there were more females than males among high readers but an equal number of males and females among low readers.

There was no significant difference between low readers and high readers with regard to income level. However, one-fourth of the respondents were either not knowledgeable of their household income or chose not to respond.

The second hypothesis was rejected. There was a statistically significant difference between low readers and high readers in their motives for enrolling in ABE programs. Low readers expressed an interest in basic skills, job/better life, and coping skills. High readers were more concerned with job/better life, the GED, and further education.

The third hypothesis was rejected. There was a statistically significant difference between low readers and high readers in their desire to learn functional competencies. Low readers preferred these competencies more than high readers did. In order to specify these differences, further analysis was conducted by separating the 42 competencies into reading-related and non-reading-related competencies. These two groups of competencies were tested for a difference between low readers and high

readers in their desire to learn them. This difference was tested in hypotheses four and five.

The fourth hypothesis was rejected. There was a statistically significant difference between low readers and high readers in their desire to learn reading-related competencies. Low readers preferred the following competencies more than high readers did: "Reading and using help wanted ads in the newspaper," "Guarantees and warranties," "How to read and use a voting ballot," "How to use a city map or road map," etc.

The fifth hypothesis was accepted. There was no statistically significant difference between low readers and high readers in their desire to learn non-reading-related competencies such as "Where to get help if you're cheated," "How laws are made," "Fringe benefits offered by different employers," "Where to get help finding a job," etc.

On the basis of hypotheses four and five, it was concluded that the desire to learn reading-related competencies in particular, accounted for the variance between low readers and high readers in their desire to learn the overall functional competencies.

Further analysis of the data led to the conclusion that low readers desired to learn reading-related competencies that included basic reading skills as well as higher level reading skills. High readers, however,

generally desired to learn reading-related competencies that primarily involved the higher level reading skills. Both low readers and high readers had a high desire to learn the non-reading-related competencies. On the basis of this analysis, it should not be concluded that reading ability is inversely related to the desire to learn reading-related competencies.

Suggestions for Further Research

There is a significant difference in the motives for enrolling in ABE programs of low readers and high readers that can at best only be speculated upon by this study. It is suggested that further research examine these motives in light of the desire to learn reading-related competencies expressed by low readers and high readers in ABE programs.

In the existing research (Flaherty, 1977a), the relationship between basic reading skill and functional competency is as yet tenuous. This study provided evidence that, on the whole, ABE students desired to learn reading skills in the context of functional competencies. However, further research is necessary to determine the type of reading skills specifically needed by low readers and high readers in order for them to perform reading-related competencies.

This study has specifically focused on the desire

to learn reading-related competencies on the part of low readers and high readers in ABE programs. However, the field of ABE can at best speculate about those readers who did not desire to learn reading-related competencies. Could it be that they already have these competencies, or that they have discovered these are not necessary for survival, or have they found other means of functioning and compensating for their lack of these competencies? Further inquiry into this portion of the ABE population is necessary before program planners look at curriculum objectives for achieving the reading-related competencies.

Finally, an item analysis of the desire to learn reading-related competencies is suggested in order to determine which of these competencies do and which do not add to predicting desire to learn reading-related competencies on the part of ABE students in general and low readers and high readers in particular.

Pursuant to this introspective study of the desire to learn should be a follow-up assessment measuring the number of low readers and high readers in the ABE population who achieved their desire to learn reading-related competencies, acquired the reading skills related to such competencies, and, in addition, achieved their motives for enrolling in the ABE program.

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APPENDIX A

ADULT FUNCTIONAL COMPETENCY PROJECT

INTERVIEW SCHEDULE

Appendix removed due to poor reproducibility.